Rec'd 5/28/09

District I
1625 N French Dr , Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St Francis Dr , Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action: ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☒ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Modification to an existing permit
☐ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances

1.
Operator: BOPCO, L.P. OGRID #: 001801
Address: P.O. Box 2760 Midland, TX 79702
Facility or well name: Big Eddy Unit #162
API Number: 30-015-36020 OCD Permit Number:
U/L or Qtr/Qtr SWNE Section 7 Township 21S Range 29E County: EDDY
Center of Proposed Design: Latitude N 32.495778 Longitude W 104.022056 NAD: ☐1927 ☒ 1983
Surface Owner ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☒ **Pit:** Subsection F or G of 19 15.17 11 NMAC
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☒ Lined ☐ Unlined Liner type Thickness mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other
☐ String-Reinforced
Liner Seams: ☒ Welded ☐ Factory ☐ Other Volume: bbl Dimensions: L x W x D

3.
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other
☐ Lined ☐ Unlined Liner type: Thickness mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other
Liner Seams ☐ Welded ☐ Factory ☐ Other

4.
☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: bbl Type of fluid:
Tank Construction material:
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other
Liner type: Thickness mil ☐ HDPE ☐ PVC ☐ Other

5.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

Final Closure Date 1/19/09

6.

Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*

☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

☐ Alternate. Please specify

7.

Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☐ Netting ☐ Other

☐ Monthly inspections (If netting or screening is not physically feasible)

8.

Signs: Subsection C of 19.15.17.11 NMAC

☒ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☒ Signed in compliance with 19.15.3.103 NMAC

9.

Administrative Approvals and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☐ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. **Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.**

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☐ NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

11.
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: or Permit Number:

12.
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number:

☐ Previously Approved Operating and Maintenance Plan API Number: *(Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)*

13.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14.
Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Closed-loop System ☐ Alternative

Proposed Closure Method:
- ☐ Waste Excavation and Removal
- ☐ Waste Removal (Closed-loop systems only)
- ☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
  - ☐ In-place Burial ☐ On-site Trench Burial
- ☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)

Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: Disposal Facility Permit Number:

Disposal Facility Name: Disposal Facility Permit Number:

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations:
☐ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC

Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

18.

On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.
Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

20.
OCD Approval: ☐ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: _____ **Approval Date:** _____

Title: _____ **OCD Permit Number:** _____

21.
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☒ **Closure Completion Date:** 1/19/09

22.
Closure Method:

☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)

☐ If different from approved plan, please explain.

23.
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: Disposal Facility Permit Number:

Disposal Facility Name: Disposal Facility Permit Number:

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24.
Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***

☒ Proof of Closure Notice (surface owner and division)
☐ Proof of Deed Notice (required for on-site closure)
☒ Plot Plan (for on-site closures and temporary pits)
☒ Confirmation Sampling Analytical Results (if applicable)
☐ Waste Material Sampling Analytical Results (required for on-site closure)
☒ Disposal Facility Name and Permit Number
☒ Soil Backfilling and Cover Installation
☒ Re-vegetation Application Rates and Seeding Technique
☒ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐1927 ☐ 1983

25.
Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Annette Childers Title: Administrative Assitant

Signature: Annette Childers Date: 2-10-09

e-mail address: machilders@basspet.com Telephone: (432) 683-2277

Accepted for record
NMOCD
MAY 29 2009

MAY 28 2009

Waste Excavation and Removal Closure Plan

BOPCO, L.P.
Big Eddy Unit #162
Section 7, T-21-S, R-29-E
Eddy County, New Mexico

SPORT ENVIRONMENTAL SERVICES, PLLC
502 N. Big Spring Street, Midland, Texas 79701
Business: 432.683.1100 Fax: 888.500.0622

May 14, 2009

Mr. Mike Bratcher
State of New Mexico
Oil Conservation Division
1301 W. Grand
Artesia, NM 88210

Re: **Waste Excavation and Removal Closure Report**
BOPCO, L.P., Big Eddy Unit #162
Section 7, T-21-S, R-29-E
Eddy County, New Mexico

Dear Mr. Bratcher,

On behalf of BOPCO, L.P., Sport Environmental Services is providing the enclosed "Waste Excavation and Removal Closure" report and C-144 closure form for BOPCO, L.P.'s Big Eddy Unit #162 pit location. The company has undergone a name change since the time of pit closure, explaining the previous use of BEPCO, L.P. throughout previously filed and attached documents.

In an effort to fully delineate the pit location both horizontally and vertically, extensive soil investigation was conducted. Attached please find a site plan denoting sample locations along with the associated analytical results. Each soil sample was analyzed for **Total Petroleum Hydrocarbons** (C_6-C_{12} Gasoline Range Hydrocarbons or GRO; C_{12}-C_{18} Diesel Range Hydrocarbons or DRO; C_{28}-C_{35} Oil Range Hydrocarbons; and Total TPH) using Methods 418.1 and 8015M, **Chlorides (Cl)** EPA Method 300/300.1, and **Total BTEX** (Benzene; Toluene; Ethylbenzene; m,p-Xylene; o-Xylene, Total Xylenes, and total BTEX) using the Method 8021B/5030. This pit was sampled per the requirements set forth in NMAC 19.15.17.13 B(1)(b).

In summary, the TPH and Combined DRO and GRO fraction levels within all soil samples analyzed were below the regulatory limit. According to the New Mexico Oil Conservation Division and the New Mexico Office of the State Engineer iWATERS, groundwater is greater than 100 feet below ground surface (100' bgs) resulting in a soil chloride limitation of 1000 mg/kg. Analytical results demonstrate chloride levels are below the regulatory limitation.

There were a total of two rounds of delineation and confirmation sampling events, conducted on January 6, 2009 and January 13, 2009. Analytical results for each soil sample and the date the sample was determined clean are provided below and also condensed for your convenience within the attached **Sample Data Summary**. As required, email transmissions demonstrating 48-hour notification of sampling events and equipment mobilization are available upon request.

Sample location	Sample ID	Chloride Level	"Clean" Date
North Pit Wall	NEW-001 Composite	258 mg/kg	January 6, 2009
East Pit Wall	EEW-001 Composite	126 mg/kg	January 6, 2009
South Pit Wall	SEW-001 Composite	21.6 mg/kg	January 13, 2009
West Pit Wall	WEW-001 Composite	44.7mg/kg	January 6, 2009
Pit Floor	NWF-001	307 mg/kg	January 6, 2009
	NCF-001	190 mg/kg	January 6, 2009
	NEF-001	287 mg/kg	January 6, 2009
	ECF-001	184 mg/kg	January 6, 2009
	SEF-001	861 mg/kg	January 6, 2009
	CEF-001	124 mg/kg	January 6, 2009
	CWF-001	261 mg/kg	January 6, 2009
	SWF-002	ND	January 6, 2009
	WCF-001	152 mg/kg	January 6, 2009
	CENTER-001	34.2 mg/kg	January 6, 2009

Big D Environmental performed excavation and removal activities associated with the pit waste material. All excavated waste was disposed of off-site at a NMOCD permitted and approved facility, Controlled Recovery Inc. (Permit #R-9166). Waste manifesting documentation is maintained by Big D Environmental. The area was subsequently backfilled with unimpacted caliche and a two foot layer of topsoil.

During the reclamation phase of the pit closure, the site was reclaimed to a natural condition that blends with the surrounding topography; involving restoring the original landform or creating a landform that approximates and blends in with the surrounding landform. Disturbed areas will be re-vegetated to native species, controlling erosion, controlling invasive non-native plants and noxious weeds. A soil cover design consisting of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater has been provided. The soil cover was constructed to mimic the existing grade and prevent ponding of water and erosion of the cover material.

broadcast method. When broadcasting the seed, the pounds per acre will be doubled. As required by NMAC 19.15.17.13(I)(2), successful reclamation is considered to be 70% re-growth of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. During the two growing seasons, that prove viability, there will be no artificial irrigation of the vegetation. Repeat seeding or planting will occur, until required vegetation coverage is successfully achieved. Evaluation of growth will not be made before completion of at least one full growing season after seeding. Photographs of existing vegetation were taken prior to constructing the drilling pit location, as a tool to confirm re-growth of 70% native vegetative coverage.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

Pounds of seed **X** percent purity **X** percent germination = pounds pure life seed

Enclosed you will find that the requirements set forth with the Waste Excavation and removal closure plan checklist denoted with in Box 15 of the Form C-144 for Pit Closures have been addressed herein. This closure report includes protocols and procedures

If you have any questions or comments with regard to this matter, please contact me at my office (432.683.1100) or on my cell (432.553.8555). I would be more than happy to review these results with you.

Sincerely,

Debi S. Moore

Debi Sport Moore, M.E., R.E.P.A.
President

Enclosures: 2 Waste Excavation and Removal Closure Reports

Cc: Mr. William R. Dannels
C.K. "Buddy" Jenkins
BOPCO, L.P.
dba Bass Enterprises Production Co.
P.O. Box 2760
Midland, TX 79702

BOPCO, L.P.
Big Eddy Unit #162
Section 7, T-21-S, R-29-E
Eddy County, New Mexico

Form C-144 Pit Closure
and
Form 3160-5 BLM Sundry Notice

Big Eddy Unit #162

CRI
CONTROLLED RECOVERY, INC

The Oilfield Waste Disposal Experts.℠

Disposal Facility Name

Controlled Recovery, Inc

Permit Number

R-9166

Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OM B No 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160 - 3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

5. Lease Serial No.
NMLC 068284

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
Big Eddy Unit #162

2. Name of Operator **BOPCO, L.P.**

9. API Well No.
30-015-36020

3a. Address
P.O. BOX 2760 Midland, TX 79702

3b. Phone No. *(include area code)*
432-683-2277

10. Field and Pool, or Exploratory Area
Golden Lane; (Morrow) Field

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
SWNE , SEC 7 T21S R29E , LAT N32.495778 DEG, LONG W104.022056

11. County or Parish, State
EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☑ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other **Pit Closure**
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Pit was closed to meet requlatory requirements written under 19.15.17.13 NMAC temporary pit Waste Excavation and Removal on 01/19/09. See attached NMOCD Form C-144.

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)* Annette Childers — Title Administrative Assistant

Signature Annette Childers — Date 2-16-09

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by _____ Title _____ Date _____

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Office

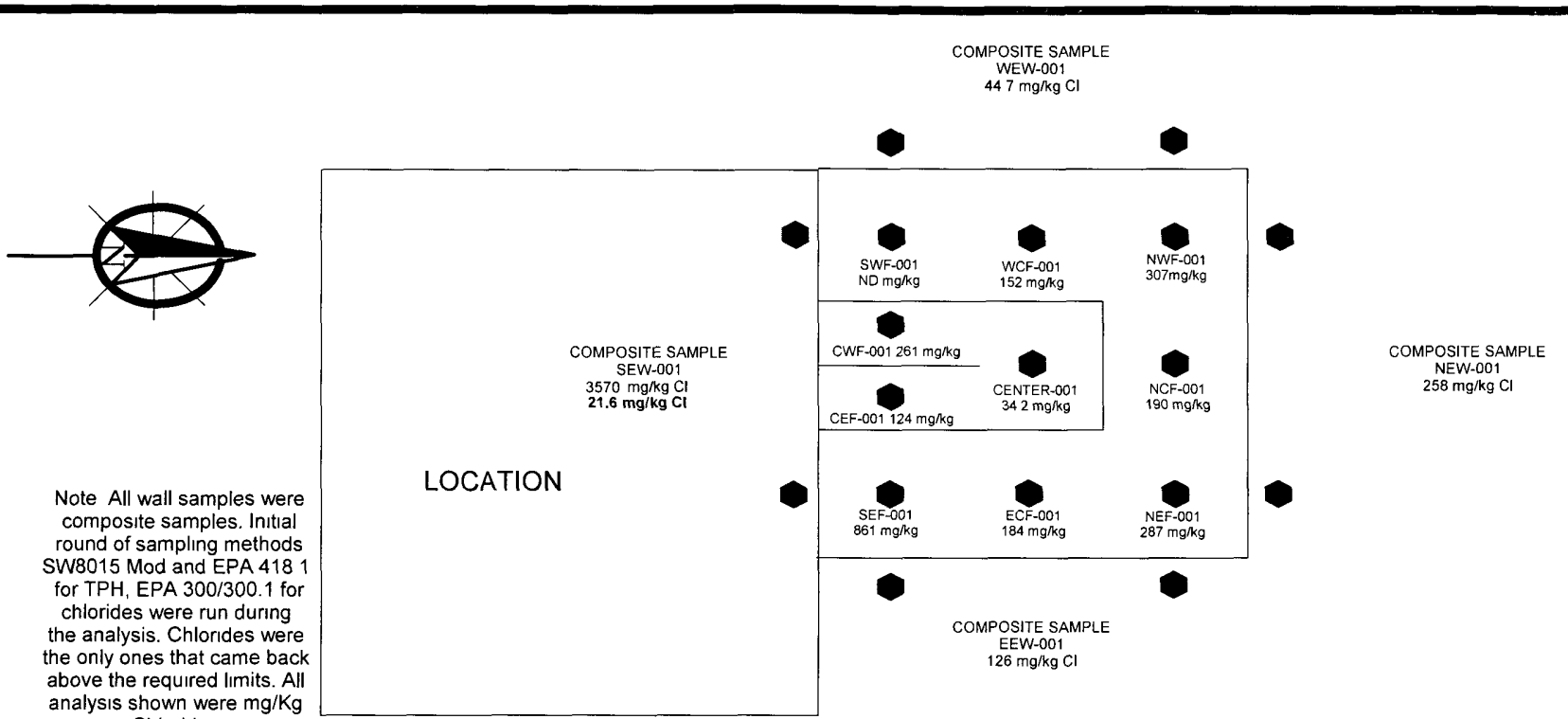
Title 18 U.S.C. Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

BOPCO, L.P.
Big Eddy Unit #162
Section 7, T-21-S, R-29-E
Eddy County, New Mexico

SITE PLAN DENOTING
PIT CLOSURE SAMPLING LOCATIONS

Big Eddy Unit #162



Note All wall samples were composite samples. Initial round of sampling methods SW8015 Mod and EPA 418 1 for TPH, EPA 300/300.1 for chlorides were run during the analysis. Chlorides were the only ones that came back above the required limits. All analysis shown were mg/Kg Chlorides.

Round One Samples - January 6, 2009
Round Two Samples - January 13, 2009

SPORT ENVIRONMENTAL SERVICES

BOPCO
Big Eddy Unit #162
Section 7, T21S, R29E
Eddy County, New Mexico

Confirmation Sampling Plan

BOPCO, L.P.
Big Eddy Unit #162
Section 7, T-21-S, R-29-E
Eddy County, New Mexico

SAMPLE DATA SUMMARY

Big Eddy Unit #162

Sample Data Summary

Project Name: BOPCO, L.P. - Big Eddy Unit #162
Project Location: Eddy County, New Mexico

Analytical Results

Methods: SW8015 Mod (TPH), EPA 418.1 (TPH), EPA 8021B (BTEX), EPA 300 (Cl)

Sample ID	Lab ID	Matrix	Sample Depth	Date Sampled	Date Received	Carbon Ranges C6-C12 (mg/kg dry)	Carbon Ranges C12-C28	Carbon Ranges C28-C35	Total Petroleum Hydrocarbons by SW8015 Mod	Total TPH by EPA 418.1	Benzene	Toluene	Ethylbenzene	Xylene (p/m)	Xylene (o)	Total Xylenes	Total BTEX	Chloride (Cl) (mg/kg wet)	% Moisture
SWF-001	321755-001	Soil	14 ft	1/6/2009 0:00	1/7/2009 7 50	ND	ND	ND	ND	79 0	ND	ND	ND	ND	ND	ND	ND	ND	ND
CWF-001	321755-002	Soil	12 ft	1/6/2009 0:00	1/7/2009 7 50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	152	ND
NWF-001	321755-003	Soil	22 ft	1/6/2009 0:00	1/7/2009 7.50	15 6	ND	ND	15.6	ND	ND	ND	ND	ND	ND	ND	ND	307	1 03
NCF-001	321755-004	Soil	12 ft	1/6/2009 0 00	1/7/2009 7:50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190	ND
NEF-001	321755-005	Soil	12 ft	1/6/2009 0 00	1/7/2009 7 50	15.1	ND	ND	15 1	ND	ND	ND	ND	ND	ND	ND	ND	287	ND
CEF-001	321755-006	Soil	12 ft	1/6/2009 0.00	1/7/2009 7:50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	184	ND
SEF-001	321755-007	Soil	12 ft	1/6/2009 0 00	1/7/2009 7 50	22 9	ND	ND	22.9	ND	ND	ND	ND	ND	ND	ND	ND	864	ND
WCF-001	321755-008	Soil	12 ft	1/6/2009 0:00	1/7/2009 7.50	22.6	ND	ND	22 6	ND	ND	ND	ND	ND	ND	ND	ND	266	1.88
ECF-001	321755-009	Soil	12 ft	1/6/2009 0:00	1/7/2009 7 50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	125	ND
Center-001	321755-010	Soil	12 ft	1/6/2009 0:00	1/7/2009 7:50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35 6	4 01
5PT Composite	321755-011	Soil		1/6/2009 0 00	1/7/2009 7:50	15 9	15 8	ND	31 7	41 4	ND	ND	ND	ND	ND	ND	ND	658	0 765
EEW-001	321755-012	Soil	6 ft	1/6/2009 0:00	1/7/2009 7:50	ND	ND	ND	ND	67 5	ND	ND	ND	ND	ND	ND	ND	127	ND
SEW-001	321755-013	Soil	6 ft	1/6/2009 0 00	1/7/2009 7:50	ND	67.3	ND	67 3	157	ND	ND	ND	ND	ND	ND	ND	**3590**	ND
NEW-001	321755-014	Soil	6 ft	1/6/2009 0 00	1/7/2009 7:50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	259	ND
WEW-001	321755-015	Soil	6 ft	1/6/2009 0:00	1/7/2009 7:50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	44 9	ND

Sample Data Summary

Project Name: BOPCO, L.P. - Big Eddy Unit #162
Project Location: Eddy County, New Mexico

						Analytical Results												
						Methods: SW8015 Mod (TPH), EPA 8021B (BTEX), EPA 300 (Cl)												
Sample ID	Lab ID	Matrix	Sample Depth	Date Sampled	Date Received	Carbon Ranges C6-C12 (mg/kg dry)	Carbon Ranges C12-C28	Carbon Ranges C28-C35	Total Hydrocarbons	Benzene	Toluene	Ethylbenzene	Xylene (p/m)	Xylene (o)	Total Xylenes	Total BTEX	Chloride (Cl) (mg/kg wet)	% Moisture
SEW-002	322379-001	Soil	6 ft	1/13/2009 0 00	1/14/2009 8 05												21.6	3 24

BOPCO, L.P.
Big Eddy Unit #162
Section 7, T-21-S, R-29-E
Eddy County, New Mexico

ANALYTICAL RESULTS
XENCO LABORATORIES
Big Eddy Unit #162

Analytical Report 322379

for

Sport Environmental Services, PLLC

Project Manager: Debi Smith

BOPCO, L.P.

Big Eddy Unit #162

15-JAN-09

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215-08B-TX - Odessa/Midland, TX T104704400-08-TX

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Norcross(Atlanta), GA E87429

South Carolina certification numbers:
Norcross(Atlanta), GA 98015

North Carolina certification numbers:
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

15-JAN-09

Project Manager: **Debi Smith**
Sport Environmental Services, PLLC
502 North Big Spring Street
Midland, TX 79701

Reference: XENCO Report No: **322379**
BOPCO, L.P.
Project Address:

Debi Smith:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 322379. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 322379 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 322379

Sport Environmental Services, PLLC, Midland, TX

BOPCO, L.P.

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SEW-002	S	Jan-13-09 00:00	6 ft	322379-001

Certificate of Analysis Summary 322379

Sport Environmental Services, PLLC, Midland, TX

Project Name: BOPCO, L.P.

Project Id: Big Eddy Unit #162
Contact: Debi Smith
Project Location:

Date Received in Lab: Wed Jan-14-09 08 05 am
Report Date: 15-JAN-09
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	322379-001					
	Field Id:	SEW-002					
	Depth:	6- ft					
	Matrix:	SOIL					
	Sampled:	Jan-13-09 00 00					
Anions by EPA 300	*Extracted:*						
	Analyzed:	Jan-14-09 09 46					
	Units/RL:	mg/kg RL					
Chloride		21 6 5 17					
Percent Moisture	*Extracted:*						
	Analyzed:	Jan-14-09 09 00					
	Units/RL:	% RL					
Percent Moisture		3 24					

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Outside XENCO's scope of NELAC Accreditation.

Blank Spike Recovery

Project Name: BOPCO, L.P.

Work Order #: 322379 **Project ID:** Big Eddy Unit #162

Lab Batch #: 746448 **Sample:** 746448-1-BKS **Matrix:** Solid

Date Analyzed: 01/14/2009 **Date Prepared:** 01/14/2009 **Analyst:** LATCOR

Reporting Units: mg/kg **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

Anions by EPA 300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	10 0	10 1	101	90-110	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes

Form 3 - MS Recoveries

Project Name: BOPCO, L.P.

Work Order #: 322379
Lab Batch #: 746448
Date Analyzed: 01/14/2009
QC- Sample ID: 322379-001 S
Reporting Units: mg/kg

Project ID: Big Eddy Unit #162
Date Prepared: 01/14/2009
Analyst: LATCOR
Batch #: 1
Matrix: Soil

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	21 6	103	128	103	80-120	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

Sample Duplicate Recovery

Project Name: BOPCO, L.P.

Work Order #: 322379

Lab Batch #: 746448 **Project ID:** Big Eddy Unit #162

Date Analyzed: 01/14/2009 **Date Prepared:** 01/14/2009 **Analyst:** LATCOR

QC- Sample ID: 322379-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by EPA 300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	21 6	20 8	4	20	

Lab Batch #: 746468

Date Analyzed: 01/14/2009 **Date Prepared:** 01/14/2009 **Analyst:** BEV

QC- Sample ID: 322379-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	3 24	2 72	17	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes

Xenco Laboratories
The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone 432-563-1800
Fax: 432-563-1713

Project Manager: Debi Smith
Company Name: Sport Environmental Services
Company Address:
City/State/Zip:
Telephone No:
Fax No:
Sampler Signature: [signature]
e-mail:

Project Name: BOPCO, L.P.
Project #: Big Eddy, Unit #162
Project Loc:
PO #:
Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 322379

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other)	TPH 418.1 8015M 8015B	TPH TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
-001	SEW-002		6'	1-13-09			1 (4oz glass)								X COOL	S				X										X	

Analyze For: TCLP / TOTAL

Special Instructions:

Relinquished by	Date	Time	Received by	Date	Time
[signature]	1-14-09	8:05			
			Received by ELOT: Jeannie Fitch	01-14-09	0805

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
Labels on container(s) Y N
Custody seals on container(s) Y (N)
Custody seals on cooler(s) Y N (NA)
Sample Hand Delivered (Y) N
by Sampler/Client Rep ? Y N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 6.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Sport Environmental

Date/ Time: 01-14-09 @ 0805

Lab ID #: 322379

Initials: JMF

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	6.0 °C	
#2	Shipping container in good condition?	Yes	No	(N/A)	
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present (N/A)	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	(Not Present)	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	(ID written on Cont./ Lid)	
#9	Container label(s) legible and intact?	Yes	No	(Not Applicable)	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 321755

for

Sport Environmental Services, PLLC

Project Manager: Debi Smith

BEPCO

Big Eddy Unit 162

20-JAN-09

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215-08B-TX - Odessa/Midland, TX T104704400-08-TX

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Norcross(Atlanta), GA E87429

South Carolina certification numbers:
Norcross(Atlanta), GA 98015

North Carolina certification numbers:
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

20-JAN-09

Project Manager: **Debi Smith**
Sport Environmental Services, PLLC
502 North Big Spring Street
Midland, TX 79701

Reference: XENCO Report No: **321755**
BEPCO
Project Address:

Debi Smith:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 321755. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 321755 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 321755

Sport Environmental Services, PLLC, Midland, TX

BEPCO

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SWF-001	S	Jan-06-09 00:00	14 ft	321755-001
CWF-001	S	Jan-06-09 00:00	12 ft	321755-002
NWF-001	S	Jan-06-09 00:00	22 ft	321755-003
NCF-001	S	Jan-06-09 00:00	12 ft	321755-004
NEF-001	S	Jan-06-09 00:00	12 ft	321755-005
CEF-001	S	Jan-06-09 00:00	12 ft	321755-006
SEF-001	S	Jan-06-09 00:00	12 ft	321755-007
WCF-001	S	Jan-06-09 00:00	12 ft	321755-008
ECF-001	S	Jan-06-09 00:00	12 ft	321755-009
Center-001	S	Jan-06-09 00:00	12 ft	321755-010
5PT Composite	S	Jan-06-09 00:00		321755-011
EEW-001	S	Jan-06-09 00:00	6 ft	321755-012
SEW-001	S	Jan-06-09 00:00	6 ft	321755-013
NEW-001	S	Jan-06-09 00:00	6 ft	321755-014
WEW-001	S	Jan-06-09 00:00	6 ft	321755-015

Certificate of Analysis Summary 321755

Sport Environmental Services, PLLC, Midland, TX

Project Name: BEPCO

Project Id: Big Eddy Unit 162
Contact: Debi Smith
Project Location:

Date Received in Lab: Wed Jan-07-09 07 50 am
Report Date: 20-JAN-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	321755-001		321755-002		321755-003		321755-004		321755-005		321755-006	
	Field Id:	SWF-001		CWF-001		NWF-001		NCF-001		NEF-001		CEF-001	
	Depth:	14 ft		12 ft		22 ft		12 ft		12 ft		12 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00	
Anions by EPA 300	*Extracted:*												
	Analyzed:	Jan-07-09 17 10		Jan-07-09 17 10		Jan-07-09 17 10		Jan-07-09 17 10		Jan-07-09 17 10		Jan-07-09 17 10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		ND	5 04	152	5 03	307	10 1	190	5 01	287	10 0	184	5 02
BTEX by EPA 8021B	*Extracted:*	Jan-07-09 10 00		Jan-07-09 10 00		Jan-07-09 10 00		Jan-07-09 10 00		Jan-07-09 10 00		Jan-07-09 10 00	
	Analyzed:	Jan-07-09 12 41		Jan-07-09 13 05		Jan-07-09 13 29		Jan-07-09 13 53		Jan-07-09 14 17		Jan-07-09 14 41	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010
Toluene		ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020
Ethylbenzene		ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010
m,p-Xylenes		ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020
o-Xylene		ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010
Total Xylenes		ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0020
Total BTEX		ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010
Percent Moisture	*Extracted:*												
	Analyzed:	Jan-07-09 14 50		Jan-07-09 14 50		Jan-07-09 14 50		Jan-07-09 14 50		Jan-07-09 14 50		Jan-07-09 14 50	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		ND	1 00	ND	1 00	1 03	1 00	ND	1 00	ND	1 00	ND	1 00
TPH By SW8015 Mod	*Extracted:*	Jan-07-09 09 00		Jan-07-09 09 00		Jan-07-09 09 00		Jan-07-09 09 00		Jan-07-09 09 00		Jan-08-09 12 30	
	Analyzed:	Jan-07-09 18 55		Jan-07-09 19 18		Jan-07-09 19 41		Jan-07-09 20 05		Jan-07-09 20 27		Jan-08-09 17 16	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	15 1	ND	15 1	15 6	15 2	ND	15 0	15 1	15 1	ND	15 1
C12-C28 Diesel Range Hydrocarbons		ND	15 1	ND	15 1	ND	15 2	ND	15 0	ND	15 1	ND	15 1
C28-C35 Oil Range Hydrocarbons		ND	15 1	ND	15 1	ND	15 2	ND	15 0	ND	15 1	ND	15 1
Total TPH		ND	15 1	ND	15 1	15 6	15 2	ND	15 0	15 1	15 1	ND	15 1

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Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 321755

Sport Environmental Services, PLLC, Midland, TX

Project Name: BEPCO

Project Id: Big Eddy Unit 162
Contact: Debi Smith
Project Location:

Date Received in Lab: Wed Jan-07-09 07 50 am
Report Date: 20-JAN-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	321755-001		321755-002		321755-003		321755-004		321755-005		321755-006	
	Field Id:	SWF-001		CWF-001		NWF-001		NCF-001		NEF-001		CEF-001	
	Depth:	14 ft		12 ft		22 ft		12 ft		12 ft		12 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00	
TPH by EPA 418.1	***Extracted:***												
	Analyzed:	Jan-20-09 17 01		Jan-20-09 14 39		Jan-20-09 14 39		Jan-20-09 14 39		Jan-20-09 14 39		Jan-20-09 14 39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
TPH, Total Petroleum Hydrocarbons		79 0	10 1	ND	10 1	ND	10 1	ND	10 0	ND	10 0	ND	10 0

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 321755

Sport Environmental Services, PLLC, Midland, TX

Project Name: BEPCO

Project Id: Big Eddy Unit 162
Contact: Debi Smith
Project Location:

Date Received in Lab: Wed Jan-07-09 07 50 am
Report Date: 20-JAN-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	321755-007		321755-008		321755-009		321755-010		321755-011		321755-012	
	Field Id:	SEF-001		WCF-001		ECF-001		Center-001		5PT Composite		EEW-001	
	Depth:	12 ft		12 ft		12 ft		12 ft				6 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00	
Anions by EPA 300	***Extracted:***												
	Analyzed:	Jan-07-09 17 10		Jan-07-09 17 10		Jan-07-09 17 10		Jan-07-09 17 10		Jan-07-09 17 10		Jan-07-09 17 10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		864	10 0	266	10 2	125	5 03	35 6	5 21	658	10 1	127	5 02
BTEX by EPA 8021B	***Extracted:***	Jan-07-09 10 00		Jan-07-09 10 00		Jan-07-09 10 00		Jan-07-09 10 00		Jan-07-09 10 00		Jan-07-09 10 00	
	Analyzed:	Jan-07-09 15 05		Jan-07-09 15 28		Jan-07-09 15 52		Jan-07-09 16 17		Jan-07-09 18 26		Jan-07-09 18 50	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010
Toluene		ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0021	ND	0 0020	ND	0 0020
Ethylbenzene		ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010
m,p-Xylenes		ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0021	ND	0 0020	ND	0 0020
o-Xylene		ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010
Total Xylenes		ND	0 0020	ND	0 0020	ND	0 0020	ND	0 0021	ND	0 0020	ND	0 0020
Total BTEX		ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010
Percent Moisture	***Extracted:***												
	Analyzed:	Jan-07-09 15 00		Jan-07-09 15 00		Jan-07-09 15 00		Jan-07-09 10 00		Jan-07-09 15 00		Jan-07-09 15 00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		ND	1 00	1 88	1 00	ND	1 00	4 01	1 00	0 765	1 00	ND	1 00
TPH By SW8015 Mod	***Extracted:***	Jan-08-09 12 30		Jan-08-09 12 30		Jan-08-09 12 30		Jan-08-09 12 30		Jan-08-09 12 30		Jan-08-09 12 30	
	Analyzed:	Jan-08-09 17 38		Jan-08-09 18 01		Jan-08-09 18 24		Jan-08-09 18 46		Jan-08-09 19 10		Jan-08-09 19 33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		22 9	15 1	22 6	15 3	ND	15 1	ND	15 6	15 9	15 1	ND	15 1
C12-C28 Diesel Range Hydrocarbons		ND	15 1	ND	15 3	ND	15 1	ND	15 6	15 8	15 1	ND	15 1
C28-C35 Oil Range Hydrocarbons		ND	15 1	ND	15 3	ND	15 1	ND	15 6	ND	15 1	ND	15 1
Total TPH		22 9	15 1	22 6	15 3	ND	15 1	ND	15 6	31 7	15 1	ND	15 1

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America - Atlanta - Corpus Christi

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 321755

Sport Environmental Services, PLLC, Midland, TX

Project Name: BEPCO

Project Id: Big Eddy Unit 162
Contact: Debi Smith
Project Location:

Date Received in Lab: Wed Jan-07-09 07 50 am
Report Date: 20-JAN-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	321755-007		321755-008		321755-009		321755-010		321755-011		321755-012	
	Field Id:	SEF-001		WCF-001		ECF-001		Center-001		5PT Composite		EEW-001	
	Depth:	12 ft		12 ft		12 ft		12 ft				6 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00	
TPH by EPA 418.1	***Extracted:***												
	Analyzed:	Jan-20-09 14 39		Jan-20-09 14 39		Jan-20-09 14 39		Jan-20-09 14 39		Jan-20-09 14 39		Jan-20-09 14 39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
TPH, Total Petroleum Hydrocarbons		ND	10 0	ND	10 2	ND	10 1	ND	10 4	41 4	10 1	67 5	10 0

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 321755

Sport Environmental Services, PLLC, Midland, TX

Project Name: BEPCO

Project Id: Big Eddy Unit 162
Contact: Debi Smith
Project Location:

Date Received in Lab: Wed Jan-07-09 07 50 am
Report Date: 20-JAN-09
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	321755-013		321755-014		321755-015					
	Field Id:	SEW-001		NEW-001		WEW-001					
	Depth:	6 ft		6 ft		6 ft					
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00					
Anions by EPA 300	*Extracted:*										
	Analyzed:	Jan-07-09 17 10		Jan-07-09 17 10		Jan-07-09 17 10					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		3590	50 2	259	5 01	44 9	5 03				
BTEX by EPA 8021B	*Extracted:*	Jan-07-09 10 00		Jan-07-09 10 00		Jan-07-09 10 00					
	Analyzed:	Jan-07-09 19 13		Jan-07-09 19 38		Jan-07-09 20 01					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		ND	0 0010	ND	0 0010	ND	0 0010				
Toluene		ND	0 0020	ND	0 0020	ND	0 0020				
Ethylbenzene		ND	*0 0010*	ND	*0 0010*	ND	*0 0010*				
m,p-Xylenes		ND	0 0020	ND	0 0020	ND	0 0020				
o-Xylene		ND	0 0010	ND	0 0010	ND	0 0010				
Total Xylenes		ND	0 0020	ND	0 0020	ND	0 0020				
Total BTEX		ND	0 0010	ND	0 0010	ND	0 0010				
Percent Moisture	*Extracted:*										
	Analyzed:	Jan-07-09 15 00		Jan-07-09 15 00		Jan-07-09 15 00					
	Units/RL:	%	RL	%	RL	%	RL				
Percent Moisture		ND	1 00	ND	1 00	ND	1 00				
TPH By SW8015 Mod	*Extracted:*	Jan-08-09 12 30		Jan-08-09 12 30		Jan-08-09 09 30					
	Analyzed:	Jan-08-09 19 56		Jan-08-09 20 19		Jan-08-09 13 05					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	15 1	ND	15 0	ND	15 1				
C12-C28 Diesel Range Hydrocarbons		67 3	15 1	ND	15 0	ND	15 1				
C28-C35 Oil Range Hydrocarbons		ND	15 1	ND	15 0	ND	15 1				
Total TPH		67 3	15 1	ND	15 0	ND	15 1				

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 321755

Sport Environmental Services, PLLC, Midland, TX

Project Name: BEPCO

Project Id: Big Eddy Unit 162
Contact: Debi Smith
Project Location:

Date Received in Lab: Wed Jan-07-09 07 50 am
Report Date: 20-JAN-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	321755-013		321755-014		321755-015							
	Field Id:	SEW-001		NEW-001		WEW-001							
	Depth:	6 ft		6 ft		6 ft							
	Matrix:	SOIL		SOIL		SOIL							
	Sampled:	Jan-06-09 00 00		Jan-06-09 00 00		Jan-06-09 00 00							
TPH by EPA 418.1	***Extracted:***												
	Analyzed:	Jan-20-09 14 39		Jan-20-09 14 39		Jan-20-09 14 39							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
TPH, Total Petroleum Hydrocarbons		157	10 0	ND	10 0	ND	10 1						

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: BEPCO

Work Orders : 321755,

Project ID: Big Eddy Unit 162

Lab Batch #: 745812 **Sample:** 321755-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0341	0 0300	114	80-120	
4-Bromofluorobenzene	0 0217	0 0300	72	80-120	**

Lab Batch #: 745812 **Sample:** 321755-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0340	0 0300	113	80-120	
4-Bromofluorobenzene	0 0238	0 0300	79	80-120	**

Lab Batch #: 745812 **Sample:** 321755-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0342	0 0300	114	80-120	
4-Bromofluorobenzene	0 0226	0 0300	75	80-120	**

Lab Batch #: 745812 **Sample:** 321755-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0338	0 0300	113	80-120	
4-Bromofluorobenzene	0 0228	0 0300	76	80-120	**

Lab Batch #: 745812 **Sample:** 321755-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0338	0 0300	113	80-120	
4-Bromofluorobenzene	0 0235	0 0300	78	80-120	**

** Surrogates outside limits, data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: BEPCO

Work Orders : 321755,

Project ID: Big Eddy Unit 162

Lab Batch #: 745812 **Sample:** 321755-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0338	0 0300	113	80-120	
4-Bromofluorobenzene	0 0228	0 0300	76	80-120	**

Lab Batch #: 745812 **Sample:** 321755-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0341	0 0300	114	80-120	
4-Bromofluorobenzene	0 0232	0 0300	77	80-120	**

Lab Batch #: 745812 **Sample:** 321755-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0338	0 0300	113	80-120	
4-Bromofluorobenzene	0 0232	0 0300	77	80-120	**

Lab Batch #: 745812 **Sample:** 321755-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0342	0 0300	114	80-120	
4-Bromofluorobenzene	0 0137	0 0300	46	80-120	**

Lab Batch #: 745812 **Sample:** 321755-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0339	0 0300	113	80-120	
4-Bromofluorobenzene	0 0216	0 0300	72	80-120	**

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: BEPCO

Work Orders : 321755,

Project ID: Big Eddy Unit 162

Lab Batch #: 745812 **Sample:** 321755-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0337	0 0300	112	80-120	
4-Bromofluorobenzene	0 0173	0 0300	58	80-120	**

Lab Batch #: 745812 **Sample:** 321755-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0339	0 0300	113	80-120	
4-Bromofluorobenzene	0 0211	0 0300	70	80-120	**

Lab Batch #: 745812 **Sample:** 321755-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0341	0 0300	114	80-120	
4-Bromofluorobenzene	0 0237	0 0300	79	80-120	**

Lab Batch #: 745812 **Sample:** 321755-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0352	0 0300	117	80-120	
4-Bromofluorobenzene	0 0227	0 0300	76	80-120	**

Lab Batch #: 745812 **Sample:** 321755-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0337	0 0300	112	80-120	
4-Bromofluorobenzene	0 0229	0 0300	76	80-120	**

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes

Form 2 - Surrogate Recoveries

Project Name: BEPCO

Work Orders : 321755,

Project ID: Big Eddy Unit 162

Lab Batch #: 745812 **Sample:** 522536-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0288	0 0300	96	80-120	
4-Bromofluorobenzene	0 0306	0 0300	102	80-120	

Lab Batch #: 745812 **Sample:** 522536-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0340	0 0300	113	80-120	
4-Bromofluorobenzene	0 0233	0 0300	78	80-120	**

Lab Batch #: 745812 **Sample:** 522536-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0295	0 0300	98	80-120	
4-Bromofluorobenzene	0 0314	0 0300	105	80-120	

Lab Batch #: 745795 **Sample:** 321733-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	100	114	70-135	
o-Terphenyl	60 7	50 0	121	70-135	

Lab Batch #: 745795 **Sample:** 321733-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	53 0	50 0	106	70-135	

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: BEPCO

Work Orders : 321755,

Project ID: Big Eddy Unit 162

Lab Batch #: 745795 **Sample:** 321755-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91 7	100	92	70-135	
o-Terphenyl	44 0	50 0	88	70-135	

Lab Batch #: 745795 **Sample:** 321755-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90 1	100	90	70-135	
o-Terphenyl	43 0	50 0	86	70-135	

Lab Batch #: 745795 **Sample:** 321755-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	100	114	70-135	
o-Terphenyl	53 4	50 0	107	70-135	

Lab Batch #: 745795 **Sample:** 321755-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89 8	100	90	70-135	
o-Terphenyl	42 5	50 0	85	70-135	

Lab Batch #: 745795 **Sample:** 321755-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88 4	100	88	70-135	
o-Terphenyl	42 5	50 0	85	70-135	

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: BEPCO

Work Orders : 321755,

Project ID: Big Eddy Unit 162

Lab Batch #: 745795 **Sample:** 522530-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	56 5	50 0	113	70-135	

Lab Batch #: 745795 **Sample:** 522530-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93 9	100	94	70-135	
o-Terphenyl	47 6	50 0	95	70-135	

Lab Batch #: 745795 **Sample:** 522530-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	51 9	50 0	104	70-135	

Lab Batch #: 745966 **Sample:** 321755-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87 0	100	87	70-135	
o-Terphenyl	45 3	50 0	91	70-135	

Lab Batch #: 745966 **Sample:** 321755-015 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99 5	100	100	70-135	
o-Terphenyl	39 8	50 0	80	70-135	

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: BEPCO

Work Orders : 321755,

Project ID: Big Eddy Unit 162

Lab Batch #: 745966 **Sample:** 321755-015 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	40 6	50 0	81	70-135	

Lab Batch #: 745966 **Sample:** 522620-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	43 7	50 0	87	70-135	

Lab Batch #: 745966 **Sample:** 522620-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89 1	100	89	70-135	
o-Terphenyl	49 1	50 0	98	70-135	

Lab Batch #: 745966 **Sample:** 522620-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	44 9	50 0	90	70-135	

Lab Batch #: 745970 **Sample:** 321755-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91 0	100	91	70-135	
o-Terphenyl	44 3	50 0	89	70-135	

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: BEPCO

Work Orders : 321755,

Project ID: Big Eddy Unit 162

Lab Batch #: 745970 **Sample:** 321755-006 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	51 0	50 0	102	70-135	

Lab Batch #: 745970 **Sample:** 321755-006 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	100	114	70-135	
o-Terphenyl	57 0	50 0	114	70-135	

Lab Batch #: 745970 **Sample:** 321755-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96 0	100	96	70-135	
o-Terphenyl	46 8	50 0	94	70-135	

Lab Batch #: 745970 **Sample:** 321755-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90 2	100	90	70-135	
o-Terphenyl	44 4	50 0	89	70-135	

Lab Batch #: 745970 **Sample:** 321755-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99 1	100	99	70-135	
o-Terphenyl	47 2	50 0	94	70-135	

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: BEPCO

Work Orders : 321755,

Project ID: Big Eddy Unit 162

Lab Batch #: 745970 **Sample:** 321755-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90 0	100	90	70-135	
o-Terphenyl	43 8	50 0	88	70-135	

Lab Batch #: 745970 **Sample:** 321755-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	100	113	70-135	
o-Terphenyl	54 0	50 0	108	70-135	

Lab Batch #: 745970 **Sample:** 321755-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91 0	100	91	70-135	
o-Terphenyl	44 5	50 0	89	70-135	

Lab Batch #: 745970 **Sample:** 321755-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90 8	100	91	70-135	
o-Terphenyl	45 2	50 0	90	70-135	

Lab Batch #: 745970 **Sample:** 321755-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87 1	100	87	70-135	
o-Terphenyl	42 3	50 0	85	70-135	

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: BEPCO

Work Orders : 321755,

Project ID: Big Eddy Unit 162

Lab Batch #: 745970 **Sample:** 522625-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	51 2	50 0	102	70-135	

Lab Batch #: 745970 **Sample:** 522625-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93 4	100	93	70-135	
o-Terphenyl	47 4	50 0	95	70-135	

Lab Batch #: 745970 **Sample:** 522625-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	51 0	50 0	102	70-135	

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes

Blank Spike Recovery

Project Name: BEPCO

Work Order #: 321755 **Project ID:** Big Eddy Unit 162

Lab Batch #: 745779 **Sample:** 745779-1-BKS **Matrix:** Solid

Date Analyzed: 01/07/2009 **Date Prepared:** 01/07/2009 **Analyst:** LATCOR

Reporting Units: mg/kg **Batch #:** 1

	BLANK /BLANK SPIKE RECOVERY STUDY					
Anions by EPA 300 **Analytes**	**Blank Result [A]**	**Spike Added [B]**	**Blank Spike Result [C]**	**Blank Spike %R [D]**	**Control Limits %R**	**Flags**
Chloride	ND	10 0	9 52	95	90-110	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes

BS / BSD Recoveries

Project Name: BEPCO

Work Order #: 321755 **Project ID:** Big Eddy Unit 162

Analyst: ASA **Date Prepared:** 01/07/2009 **Date Analyzed:** 01/07/2009

Lab Batch ID: 745812 **Sample:** 522536-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0 1000	0 1064	106	0 1	0 1025	103	4	70-130	35	
Toluene	ND	0 1000	0 1008	101	0 1	0 0982	98	3	70-130	35	
Ethylbenzene	ND	0 1000	0 1044	104	0 1	0 1026	103	2	71-129	35	
m,p-Xylenes	ND	0 2000	0 2099	105	0 2	0 2073	104	1	70-135	35	
o-Xylene	ND	0 1000	0 0982	98	0 1	0 0984	98	0	71-133	35	

Analyst: ASA **Date Prepared:** 01/20/2009 **Date Analyzed:** 01/20/2009

Lab Batch ID: 746996 **Sample:** 746996-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by EPA 418.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
TPH, Total Petroleum Hydrocarbons	ND	2500	2350	94	2500	2460	98	5	65-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: BEPCO

Work Order #: 321755 **Project ID:** Big Eddy Unit 162

Analyst: BHW **Date Prepared:** 01/07/2009 **Date Analyzed:** 01/07/2009

Lab Batch ID: 745795 **Sample:** 522530-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	**Blank Sample Result [A]**	**Spike Added [B]**	**Blank Spike Result [C]**	**Blank Spike %R [D]**	**Spike Added [E]**	**Blank Spike Duplicate Result [F]**	**Blk. Spk Dup. %R [G]**	**RPD %**	**Control Limits %R**	**Control Limits %RPD**	**Flag**
C6-C12 Gasoline Range Hydrocarbons	ND	1000	924	92	1000	903	90	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	953	95	1000	934	93	2	70-135	35	

Analyst: BHW **Date Prepared:** 01/08/2009 **Date Analyzed:** 01/08/2009

Lab Batch ID: 745966 **Sample:** 522620-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	**Blank Sample Result [A]**	**Spike Added [B]**	**Blank Spike Result [C]**	**Blank Spike %R [D]**	**Spike Added [E]**	**Blank Spike Duplicate Result [F]**	**Blk. Spk Dup. %R [G]**	**RPD %**	**Control Limits %R**	**Control Limits %RPD**	**Flag**
C6-C12 Gasoline Range Hydrocarbons	ND	1000	1060	106	1000	1060	106	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	1010	101	1000	1020	102	1	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: BEPCO

Work Order #: 321755
Analyst: BHW
Lab Batch ID: 745970
Sample: 522625-1-BKS
Units: mg/kg

Date Prepared: 01/08/2009
Batch #: 1

Project ID: Big Eddy Unit 162
Date Analyzed: 01/08/2009
Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1000	906	91	1000	890	89	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	943	94	1000	921	92	2	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: BEPCO

Work Order #: 321755

Lab Batch #: 745779

Project ID: Big Eddy Unit 162

Date Analyzed: 01/07/2009 **Date Prepared:** 01/07/2009 **Analyst:** LATCOR

QC- Sample ID: 321710-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	6920	2120	9430	118	80-120	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: BEPCO

Work Order # : 321755 **Project ID:** Big Eddy Unit 162

Lab Batch ID: 746996 **QC- Sample ID:** 321755-015 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/20/2009 **Date Prepared:** 01/20/2009 **Analyst:** ASA

Reporting Units: mg/kg

TPH by EPA 418.1 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
TPH, Total Petroleum Hydrocarbons	ND	2520	2310	92	2520	2310	92	0	65-135	35	

Lab Batch ID: 745795 **QC- Sample ID:** 321733-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/07/2009 **Date Prepared:** 01/07/2009 **Analyst:** BHW

Reporting Units: mg/kg

TPH By SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1090	1030	94	1090	1000	92	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1090	1060	97	1090	1050	96	1	70-135	35	

Lab Batch ID: 745966 **QC- Sample ID:** 321755-015 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/08/2009 **Date Prepared:** 01/08/2009 **Analyst:** BHW

Reporting Units: mg/kg

TPH By SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1010	992	98	1010	1020	101	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1010	973	96	1010	1000	99	3	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Form 3 - MS / MSD Recoveries

Project Name: BEPCO

Work Order # : 321755 **Project ID:** Big Eddy Unit 162

Lab Batch ID: 745970 **QC- Sample ID:** 321755-006 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 01/08/2009 **Date Prepared:** 01/08/2009 **Analyst:** BHW

Reporting Units: mg/kg

TPH By SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1000	910	91	1000	941	94	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	975	98	1000	992	99	1	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: BEPCO

Work Order #: 321755

Lab Batch #: 745779 **Project ID:** Big Eddy Unit 162
Date Analyzed: 01/07/2009 **Date Prepared:** 01/07/2009 **Analyst:** LATCOR
QC- Sample ID: 321710-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Anions by EPA 300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	6920	6920	0	20	

Lab Batch #: 745747
Date Analyzed: 01/07/2009 **Date Prepared:** 01/07/2009 **Analyst:** BEV
QC- Sample ID: 321733-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	4 92	5 42	10	20	

Lab Batch #: 745803
Date Analyzed: 01/07/2009 **Date Prepared:** 01/07/2009 **Analyst:** WRU
QC- Sample ID: 321755-007 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	ND	ND	NC	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes

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Environmental Lab of Texas

A Xenco Laboratories Company

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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Odessa, Texas 79765

Phone 432-563-1800
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Project Manager: Debi Sport Smith

Company Name: Sport Environmental Services

Company Address: 502 N Big Spring Suite

City/State/Zip: Midland Texas 7970

Telephone No: 432-683-100

Fax No: 888 500-0622

Sampler Signature:

e-mail: debi@sportenvironmental.com

Project Name: BEPCO - Big Eddy Unit 162

Project #:

Project Loc:

PO #:

Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 21755

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Ice 4 oz	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge, GW=Groundwater S=Soil/Solid, NP=Non-Potable Specify Other)	TPH (418.1)/(8015M) 8015B	TPH TX 1005 TX 1006	Cations (Ca Mg Na K)	Anions (Cl) SO4 Alkalinity	SAR / ESP / CEC	Metals As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX (8021B/5030) or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	SWF-001		12'	1/6/09			1	X								S	X			X					x			X	
02	CWF-001		12'	1/6/09			1	X								S	X			X					x			X	
03	NWF-001		22'	1/6/09			1	X								S	X			X					x			X	
04	NCF-001		12	1/6/09			1	X								S	X			X					x			X	
05	NEF-001		12'	1/6/09			1	X								S	X			X					x			X	
06	CEF-001		12'	1/6/09			1	X								S	X			X					x			X	
07	SEF-001		12'	1/6/09			1	X								S	X			X					x			X	
08	WCF-001		12'	1/6/09			1	X								S	X			X					x			X	
09	ECF-001		12'	1/6/09			1	X								S	X			X					x			X	
10	CENTER-001		12'	1/6/09			1	X								S	X			X					x			X	

Special Instructions: RUSH CL 5PT. Composite SWF, NWF, NEF, SEF, CENTER

Relinquished by	Date	Time	Received by	Date	Time
[signature]	1-7-09	7:50			
			Received by ELOT: [signature]	1/7/09	7:50

Laboratory Comments: 4.0 °C

Sample Containers Intact? (Y) N
VOCs Free of Headspace? Y N
Labels on container(s) written valid (Y) N
Custody seals on container(s) Y (N)
Custody seals on cooler(s) Y (N)
Sample Hand Delivered (Y) N
by Sampler/Client Rep ? Y N
by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt -5 °C

PAGE 2 of 2

Environmental Lab of Texas

A Xenco Laboratories Company

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone. 432-563-1800
Fax 432-563-1713

Project Manager	Debi Sport Smith	Project Name	BEPCO - Big Eddy Unit 162
Company Name	Sport Environmental Services	Project #	
Company Address	502 N Big Spring Stree	Project Loc	
City/State/Zip	Midland Texas 79701	PO #	
Telephone No	432 663-100	Fax No	888-500-0622
Sampler Signature		e-mail	gebi@sportenvironmental.com

Report Format ☐ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 321793

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	TPH 418.1 8015M 8015B	TPH TX 1005 TX 1006	Cations (Ca Mg Na K)	Anions (Cl SO4 Alkalinity)	SAR / ESP / CEC	Metals As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.				RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
12	EEW-001		6'	1/6/09			1	X								S	X			X					x						X	
13	SEW-001		6'	1/6/09			1	X								S	X			X					x						X	
14	NEW-001		6'	1/6/09			1	X								S	X			X					x						X	
15	WEW-001		6	1/6/09			1	X								S	X			X					x						X	
	~~5PT COMPOSITE~~ (CD)																															

Special Instructions: RUSH CL

Relinquished by	Date	Time	Received by	Date	Time
[signature]	1-7-9	7:50			
			Received by ELOT: [signature]	1/7/09	7:52

Laboratory Comments Ice, 4.0

Sample Containers Intact?	(Y)	N
VOCs Free of Headspace?	(Y)	N
Labels on container(s) written on lid	(Y)	N
Custody seals on container(s)	Y	(N)
Custody seals on cooler(s)	Y	(N)
Sample Hand Delivered	(Y)	N
by Sampler/Client Rep.?	Y	N
by Courier? UPS DHL FedEx Lone Star		
Temperature Upon Receipt	-5 °C	C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client Sprint Env

Date/ Time [illegible] 7:50

Lab ID # 32755

Initials [illegible]

Sample Receipt Checklist

				Client Initials
#1 Temperature of container/ cooler?	Yes	No	- °C	
#2 Shipping container in good condition?	Yes	No		
#3 Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4 Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5 Chain of Custody present?	Yes	No		
#6 Sample instructions complete of Chain of Custody?	Yes	No		
#7 Chain of Custody signed when relinquished/ received?	Yes	No		
#8 Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9 Container label(s) legible and intact?	Yes	No	Not Applicable	
#10 Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11 Containers supplied by ELOT?	Yes	No		
#12 Samples in proper container/ bottle?	Yes	No	See Below	
#13 Samples properly preserved?	Yes	No	See Below	
#14 Sample bottles intact?	Yes	No		
#15 Preservations documented on Chain of Custody?	Yes	No		
#16 Containers documented on Chain of Custody?	Yes	No		
#17 Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18 All samples received within sufficient hold time?	Yes	No	See Below	
#19 Subcontract of sample(s)?	Yes	No	Not Applicable	
#20 VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact ____________ Contacted by ____________ Date/ Time ____________

Regarding ______________________________

Corrective Action Taken

____

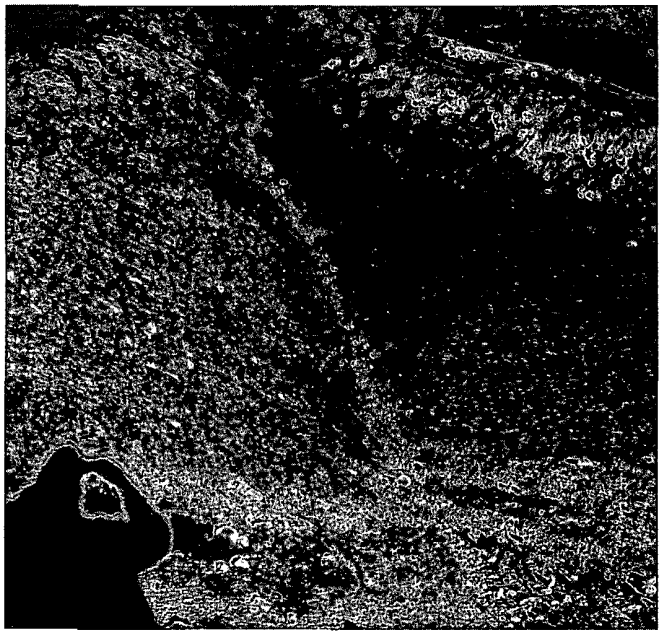
Check all that Apply

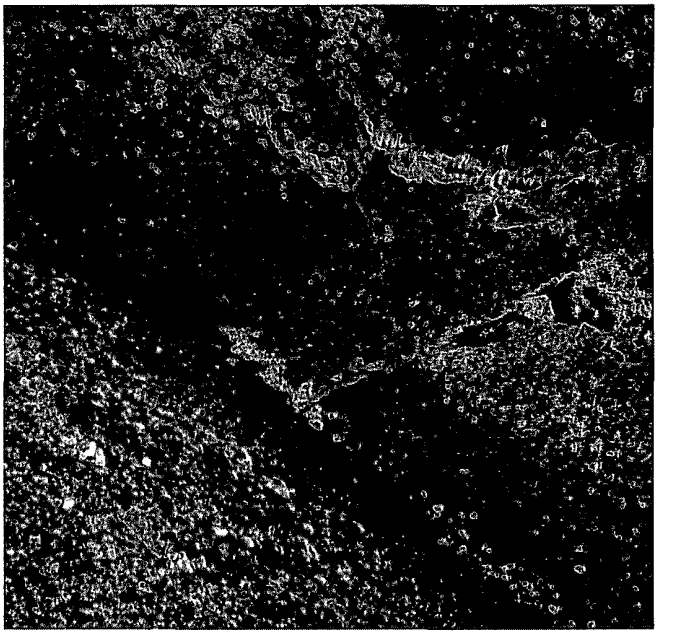
- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

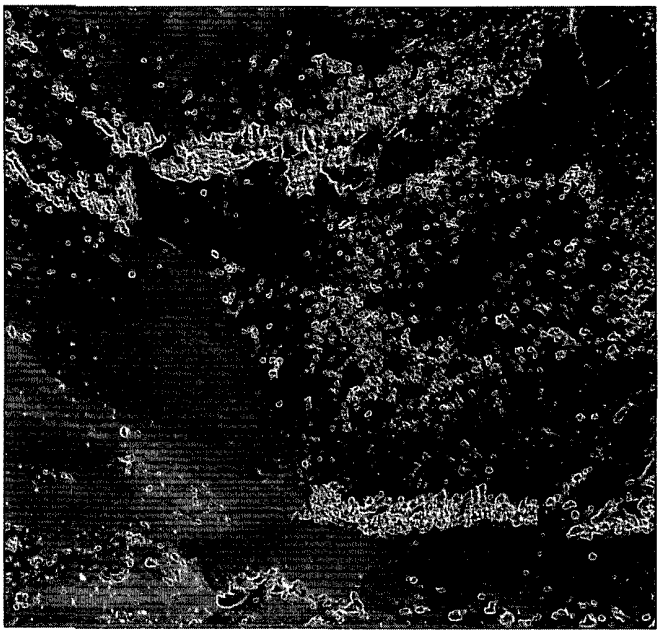
BOPCO, L.P.
Big Eddy Unit #162
Section 7, T-21-S, R-29-E
Eddy County, New Mexico

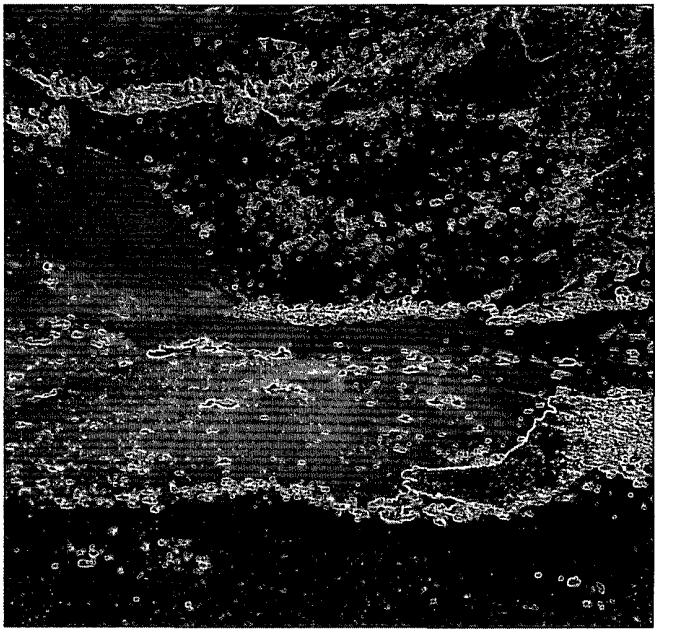
SITE PHOTOGRAPHS
TAKEN January 9, 2009
Big Eddy Unit #162

BOPCO, LP – Big Eddy Unit #162
Site Photographs taken January 9, 2009

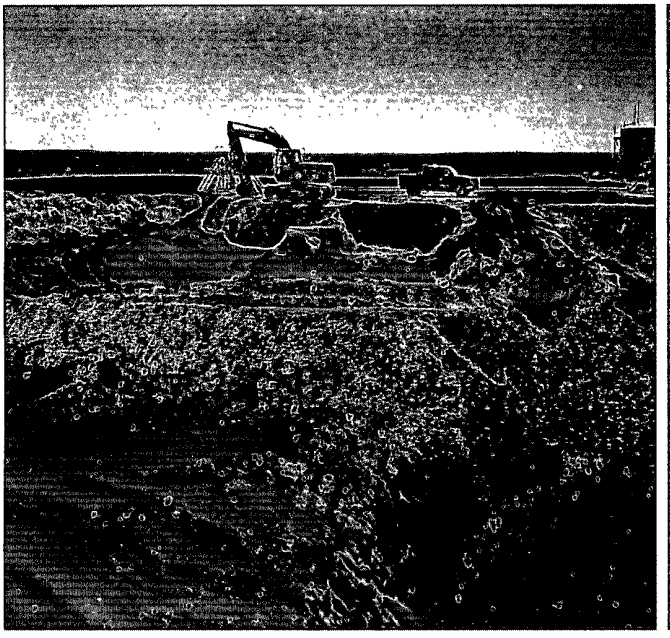


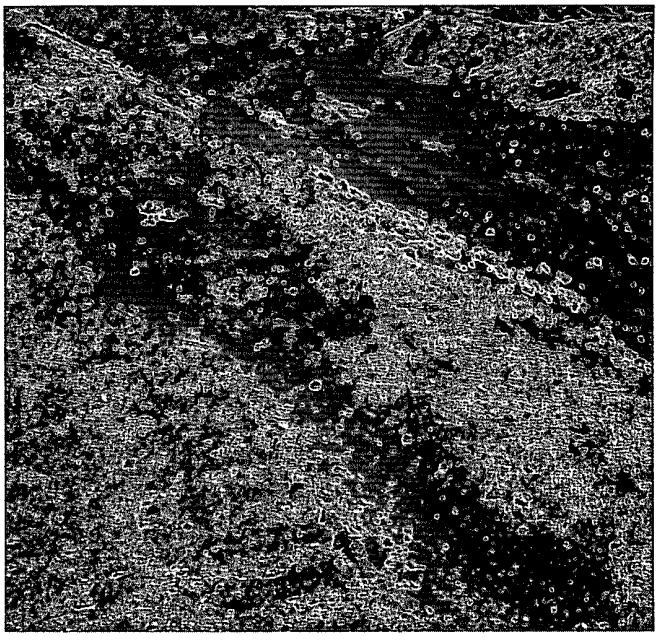


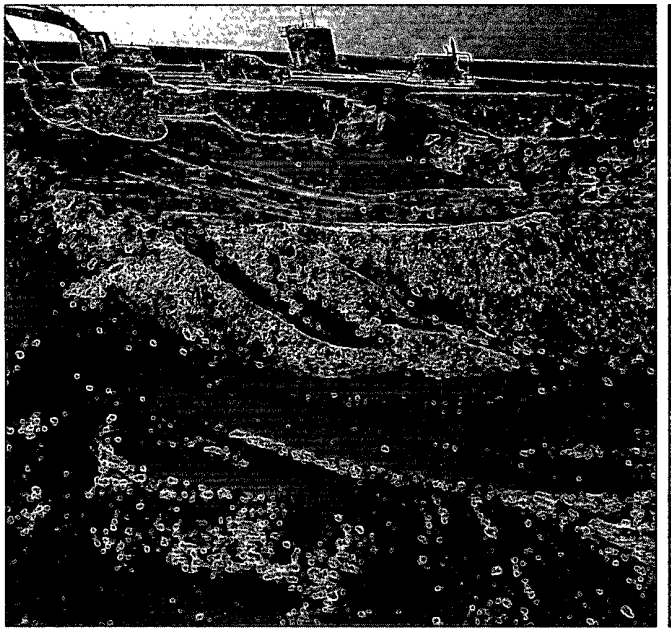




BOPCO, LP – Big Eddy Unit #162
Site Photographs taken January 9, 2009







BOPCO, LP – Big Eddy Unit #162
Site Photographs taken January 9, 2009